

REMARKS

The last Office Action of December 16, 2008 has been carefully considered. Reconsideration of the instant application in view of the foregoing amendments and the following remarks is respectfully requested.

Claims 27-38 are pending in the application. Claims 27-33 have been amended. Claims 39-40 have been added to assure that the invention enjoys the full scope of the protection to which it is entitled. These claims are supported in paragraphs [0002] and [0026] of the instant specification, as filed. No claims have been canceled. Amendments to the specification have been made. No fee is due.

CLARIFICATION AMENDMENTS TO THE SPECIFICATION

Applicant has also amended the specification to clarify ambiguities caused by the literal translation of the original German language specification. This changes are self-explanatory and cosmetic in nature and do not contain any new matter.

With respect to the term "amplitude" for the German term "Amplitude", it is noted that the correct translation of this term in the context of the present application is --range--. Therefore paragraphs [0015] and [0027] have been amended accordingly. The (digital) range of the signal corresponds to the saturation function stated in paragraph [0027] and that is what is limited by the limiter B. This is not necessarily the same as what would be customarily referred to as the "amplitude" limiting in American usage.

OBJECTION TO CLAIMS

The objection to claims 28-32, as amended, is hereby respectfully traversed. The dependency of these claims has been corrected to reflect the substitution of claim 27 for claim 1.

Also, claims 27 and 33 have been amended, for the sake of clarity, to remove the reference to "amplitude" that is superfluous.

Withdrawal of the objection to claims 28-32 is thus respectfully requested.

REJECTION UNDER 35 U.S.C. 102(a)

The rejection of claims 27 and 33 under 35 U.S.C. 102(a), both as filed and as amended above, as anticipated by U.S. Pat. No. 7,117,186 to Koza et al. is hereby respectfully traversed.

This rejection is improper because the Office Action does not consider whether the Koza patent discloses dividing a control signal into "higher value" (evhi) portion of the control signal and "lower value" (evlo) portion of the control signal, as recited in applicant's claims.

Koza does not do this. On the contrary, Koza simply "trifurcates" a control signal 512 into three identical copies 522, 524, 526 of the control signal 512 and then processes these three identical copies of the control signal 512 in parallel to produce a conventional PID control signal 590, col. 21, line 28-col. 22, line 29.

For the reasons set forth above, it is applicant's contention that Koza neither teaches nor suggests the features of the present invention, as recited in claim 27.

Claim 33 which depends from claim 27 and therefore contains all the limitations thereof, patentably distinguishes over the applied prior art in the same manner as claim 27.

Withdrawal of the rejection of claims 27 and 33 under 35 U.S.C. 102(a) is thus respectfully requested.

REJECTION UNDER 35 U.S.C. 103(a)

Claims 28-32 and 34-38 which depend from claim 27 and therefore contain all the limitations thereof, patentably distinguishes over the applied prior art in the same manner as claim 27.

The rejection of claims 28-32 and 34-38 under 35 U.S.C. 103(a) as obvious over Koza et al. in view of Smith is thus respectfully traversed given above with reference to the rejection of claims 27 and 33.

Furthermore, applicant's claims recite the use of filtering that is specific to the non-linear preprocessor recited in applicants claims that improves the dynamic range of conventional controllers without costly, extensive changes to the controller's circuits, as explained in paragraphs [0007]-[0010].

Withdrawal of the rejection of claims 28-32 and 34-38 under 35 U.S.C. 103(a) is thus respectfully requested.

CITED REFERENCES

Applicant has also carefully scrutinized the further cited prior art and finds it without any relevance to the claims on file. It is thus felt that no specific discussion thereof is necessary.

CONCLUSION

In view of the above presented remarks and amendments, it is respectfully submitted that all claims on file should be considered patentably differentiated over the art and should be allowed.

Reconsideration and allowance of the present application are respectfully requested.

Should the Examiner consider necessary or desirable any formal changes anywhere in the specification, claims and/or drawing, then it is respectfully requested that such changes be made by Examiner's Amendment, if the Examiner feels this would facilitate passage of the case to issuance. If the Examiner feels that it might be helpful in advancing this case by calling the undersigned, applicant would greatly

appreciate such a telephone interview.

Respectfully submitted,

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